REMARKS

The title has again been revised to conform more closely to the pending claims.

Claims 33 - 42, which were withdrawn from consideration as directed to a non-elected invention, have been canceled so that their subject matter can be pursued in a continuing application. Claims 8 and 21 have been amended to respectively appropriately incorporate the further limitations of Claims 7 and 30, also now canceled. As a result of the cancelation of Claims 7, 30, and 33 - 42, the claims now pending consist of Nos. 2, 3, 5, 6, 8, 21, 22, 26 - 29, 31, and 32.

Turning to the Office Action, it specifies that "the drawing corrections filed in [sic, on] 12-09-03 have been reviewed, but are not approved, as the drawings are further objected to under 37 CFR 1.83(a)". Presumably the Examiner means the amendment submitted "19" December 2003 for revising the drawings since no amendment was submitted on, or within a week of, "9" December 2003 for revising the drawings. Subject to this assumption, the objection to the drawings and the accompanying refusal to enter the requested drawing corrections are respectfully traversed.

With apparent reference to the 37 CFR 1.83(a) provision that "The drawing in a nonprovisional application must show every feature of the invention specified in the claims", the Examiner states that "Therefore, the combined subject matters that the first terminal is connected to the first and second semiconductor regions and that the first resistor is coupled between the first terminal and the second semiconductor region must be shown [in the drawings] or the features canceled from the claim(s)".

Contrary to what the Examiner says, the indicated features are currently shown in the application's drawings. More particularly, terminal A in application Figs. 12 and 13 embodies the first terminal of the claims. N^+ region 112 and p-base region 114, which respectively constitute the emitter and base of npn transistor 130 in Figs. 12 and 13, respectively embody the first and second semiconductor regions of the claims. As shown in Figs. 12 and 13, "first terminal" A is directly connected to the emitter of transistor 130 and thus to "first semiconductor region" 112.

Fig. 13 illustrates item 132 as situated between "first terminal" A and the base, i.e., "second semiconductor region" 114, of transistor 130. As provided in the last paragraph on page 10 of the specification, item 132 represents the (parasitic) base resistance of transistor

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130. That is, item 132 is the resistance from p^+ contact portion 122 of "second semiconductor region" 114 through "second semiconductor region" 114 to n-well 116 which embodies the "third semiconductor region" of the claims.

When a drawing depicts a parasitic resistance, such as a base resistance, situated between two semiconductor regions, the convention used for interpreting the drawing is that the two semiconductor regions are directly connected to each other. Accordingly, the depiction in Fig. 13 of base resistance 132 as situated between "first terminal" A and the base--again, "second semiconductor region" 114--of transistor 130 is to be interpreted as meaning that "first terminal" A and "second semiconductor region" 114 are directly connected to each other. Since Fig. 13 shows "first terminal" A as being directly connected to the emitter of transistor 130 and thus to "first semiconductor region" 112, Fig. 13 shows the feature that the first terminal is connected to the first and second semiconductor regions.

External resistor 758 in Fig. 13 embodies the first resistor of the claims. As depicted in Fig. 13, "first resistor" 758 is coupled between "first terminal" A and the base--once again, "second semiconductor region" 114--of transistor 130. Although Fig. 12 does not illustrate "first resistor" 758 as coupled between "first terminal" A and "second semiconductor region" 114, that point is immaterial because Fig. 13 depicts this coupling. Consequently, Fig. 13 of the drawings of the present application shows the feature that the first resistor is coupled between the first terminal and the second semiconductor region. Since Fig. 13 also shows the feature that the first terminal is connected to the first and second semiconductor regions, the two features which the Examiner alleges as not being shown in the drawing are, in fact, shown in Fig. 13 of the drawings.

Subject to resistor 858 in application Fig. 14 replacing resistor 758 as the element embodying the first resistor of the claims, the comments made about Fig. 13 apply to Fig. 14. The 37 CFR 1.83(a) objection to the drawings should therefore be withdrawn.

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As to the refusal to enter "the drawing corrections filed in 12-09-03", again presumably the 9 December 2003 amendment for revising the drawings, the changes requested in that amendment are independent of the 37 CFR 1.83(a) objection to the drawings. Hence, the 19 December 2003 Amendment to Drawings should be entered regardless of the disposition of the 37 CFR 1.83(a) objection to the drawings. The

supplemental amendment submitted 8 January 2004 for further revising the drawings should also be entered regardless of the disposition of the 37 CFR 1.83(a) objection.

The Office Action states that "The amendment filed on January 08, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure". The Examiner alleges that the new matter consists of the statement that "Although not shown in Fia. 12. [sic, Fig. 12,] a line thus connects the base of transistor 150 to a node between resistor 756 and current source 770" and the statement that "Although not shown in Fia. 12. [sic, Fig. 12,] a line thus connects the base of transistor 130 to a node between resistor 758 and current source 772".

An amendment was submitted 8 January 2004 for revising the drawings. However, no amendment was submitted on 8 January 2004 or on any other day in January 2004 for revising the application in the manner prescribed in the 35 USC 132 objection to the specification. Inasmuch as the amendment submitted 19 December 2003 for revising the text prescribed that the specification was to be revised in the indicated manner, Applicants' Attorney presumes that the Examiner meant to object to the 19 December 2003 text amendment as introducing new matter. Subject to this presumption, the 35 USC 132 new matter objection is respectfully traversed.

On page 18, the specification provides that "Fig. 12 shows a super-imposition of a cross-sectional view and a circuit schematic view of ESD protection structure 700" and that "Fig. 13 shows a circuit schematic view of ESD protection structure 700". Figs. 12 and 13 thus depict the same ESD protection structure in different ways.

Fig. 12 does not depict the base of transistor 150 as being connected by a line to a node between resistor 756 and current source 770". Nor does Fig. 12 depict the base of transistor 130 as being connected by a line to a node between resistor 758 and current source 772. However, Fig. 13 illustrates the base of transistor 150 as being connected by a line to a node between resistor 756 and current source 770". Fig. 13 also illustrates the base of transistor 130 as being connected by a line to a node between resistor 758 and current source 772. Since Figs. 12 and 13 depict the same structure in different ways, the original disclosure supports the sentence "Although not shown in Fig. 12, a line thus connects the base of transistor 150 to a node between resistor 756 and current source 770" and the sentence "Although not shown in Fig. 12, a line thus connects the base of transistor 130 to a

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node between resistor 758 and current source 772". The introduction of these two sentences into the specification does not constitute new matter. Accordingly, the 35 USC 132 new matter objection to the specification should be withdrawn.

Claims 2, 3, 5 - 8, 21, 22, and 26 - 32 have again been rejected under 35 USC 112 for failing to comply with the written description requirement as containing subject matter "not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention". This rejection is respectfully traversed.

The Examiner again alleges that:

> Claims 8 and 21 each recite the combination of the subject matters that the first terminal is connected to the first and second semiconductor regions and that the first resistor is coupled between the first terminal and the second semiconductor region, which is not fully supported by the original disclosure. According to the relevant embodiments shown in Figs. 13 and 14, only the first resistor (758) is coupled to the second semiconductor region, while the first terminal (A) is not directly coupled to the second semiconductor region therein. It is further noted that, in the embodiment of Fig. 12, only the first terminal (A) is coupled to the second semiconductor region (128 [sic, 114] through the P+ region), while the first resistor (758) is not directly coupled to the second semiconductor region therein.

The Examiner now further alleges that:

> It is not clear where in second semiconductor region is coupled to the first transistor and how such coupling structure can be formed,. The original specification and drawings (including Figs. 12 and 13) lack an adequate description regarding how the first and second semiconductor regions can be both connected to the first terminal, while the first resistor can still be simultaneously coupled between the first terminal and the second semiconductor region. Similar issues also exist on the second terminal side.

The preceding allegations, including the Examiner's further allegations, were all adequately addressed on pages 18 - 20 of the 19 December 2003 Amendment to Text in light of the fact that the original disclosure supports the sentence "Although not shown in Fig. 12, a line thus connects the base of transistor 150 to a node between resistor 756 and current source 770" and the sentence "Although not shown in Fig. 12, a line thus connects the base of transistor 130 to a node between resistor 758 and current source 772". Rather than repeat the comments traversing the 35 USC 112 lack-of-support rejection, the Examiner is simply

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referred to pages 18 - 20 of the 19 December 2003 Amendment to Text. Since the introduction of the quoted sentences into the specification has been shown not to introduce new matter into the disclosure, the 35 USC 112 lack-of-support rejection should be withdrawn.

Claims 2, 3, 5 - 8, 21, 22, and 26 - 32 have been rejected under 35 USC 112 for failure to satisfy the enablement requirement as containing subject matter "not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention". This rejection is respectfully traversed.

The Examiner alleges that:

> Claims 8 and 21 each recite the combination of the subject matters that the first terminal is connected to the first and second semiconductor regions and that the first resistor is coupled between the first terminal and the second semiconductor region. However, if the first terminal is connected to both of the first and second semiconductor regions, as defined in these claims, the first terminal and the second semiconductor region are then effectively shortened [sic, shorted] together. It then would effectively shorten [sic, short] the two ends of the first resistor if the first resistor is truly coupled between the first terminal and the second semiconductor region. Similarly, the recited second resistor would also be shortened [sic, shorted]. It is not clear how the recited first and second resistors could be functional if each of the two resistors has already been shortened [sic, shorted].

The Examiner now further alleges that:

> It appears that the subject matter that the first terminal is connected to both of the first and second semiconductor regions, as shown in Fig. 12, is not simply combinable with the subject matter that the first resistor is coupled between the first terminal and the second semiconductor region, as shown in Fig. 13. Otherwise, the first resistor would be directly shortened [sic, shorted] by the first terminal, given the facts that the first terminal itself is a conductor, and both of the first terminal and the first resistor are external elements, regardless [of] whether there are parasitic resistors within the semiconductor regions.

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Similar to what was said above about the 35 USC 112 lack-of-support rejection the non-enablement allegations, including the Examiner's further non-enablement allegations, were all adequately addressed on pages 20 - 22 of the 19 December 2003 Amendment to Text. Instead of repeating the comments traversing the 35 USC 112 non-enablement

rejection, the Examiner is simply referred to pages 20 - 22 of the 19 December 2003 Amendment to Text. In this regard, note that independent Claims 8 and 21 have each been amended to recite that (a) the first terminal is connected to the first semiconductor region and to the more heavily doped contact portion of the second semiconductor region and (b) that the second terminal is connected to the fifth semiconductor region and to the more heavily doped contact portion of the fourth semiconductor region. The 35 USC 112 non-enablement rejection should thus be withdrawn.

In summary, the 35 USC 112 lack-of-support and non-enablement rejections should be withdrawn. The 37 CFR 1.83(a) objection to the drawings and the 35 USC 132 objection to the specification should also be withdrawn. Claims 2, 3, 5, 6, 8, 21, 22, and 26 - 29, 31, and 32 should be allowed so that the application may proceed to issue.

Please telephone Attorney for Applicant(s) at 650-964-9767 if there are any questions.

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Respectfully submitted,

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